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ABSTRACT

Three project objectives were (1) to identify the competencies required for entry into the professional role of the teacher of vocational agriculture (exclusive of the technical competencies of scientific agriculture), (2) to validate the competencies identified, and (3) to initiate procedures for incorporating the validated competencies into the teacher education programs of the nine universities providing certification programs for vocational agriculture teachers in Texas. A list of teacher competencies was developed based on review of the literature, a working conference of teacher educators, and a pilot test with vocational agriculture teachers. The final list was incorporated in an instrument designed to illicit the respondent's opinion of the importance of each of 135 competency statements. Responses were secured from 311 of the 349 vocational agriculture teachers serving as supervising teachers in Texas (89%) and from 22 of 24 teacher trainers (92%) and 14 of 15 State staff personnel (93%). Data were compiled and became the basic documentation for decisionmaking at a second working conference of teacher educators to initiate procedures for incorporation of the validated competencies into teacher education programs of the nine universities. Outcomes, in addition to the identification and validation of a core of essential professional competencies required by vocational agriculture teachers, include the establishment of a base for the development of curriculum materials and laboratory experiences through cooperation among the agricultural education departments of the State. Another result has been development of a transportable model that could be used by other vocational teacher education disciplines to accomplish similar outcomes. (The report includes the list of competencies with mean ratings for each respondent group.) (LAS)

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IDENTIFICATION AND VALIDATION OF COMPETENCIES FOR TEACHER EDUCATION - AGRICULTURE

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IDENTIFICATION AND VALIDATION OF COMPETENCIES FOR TEACHER EDUCATION - AGRICULTURE

Introduction

Nine institutions of higher education in the State of Texas have approved teacher education programs for the training of vocational agriculture teachers. For several years, the agricultural education teacher educators in these nine universities worked independently by teacher education departments in the identification and development of competencies to be incorporated into programs of performance based teacher education. In state-wide meetings of the teacher educators held during the 1974-75 school year, it was determined that the time had arrived when benefits to departments and improved teacher education would result from the coordinated involvement of all departments and teacher educators in the identification and development of the essential competencies for agricultural education in Texas. A coordinated effort was deemed necessary to provide a common core of competencies for all beginning teachers of vocational agriculture, irrespective of the institution in which the person is prepared. In recognition of this need, the Texas Association of Teacher Educators in Agriculture formally expressed the desire for such a project. The development of a project proposal was unanimously supported and it was requested that Texas A&M University develop and submit the proposal.

While a number of studies have contributed significantly to the identification of a common core of competencies for vocational-technical teachers, it seemed important that competencies be identified and validated for vocational agriculture teachers in Texas to determine unique competencies in the subject area of agricultural education in our own state. Further, the need was paramount for an effort aimed at initiating procedures for incorporating the

validated competencies into teacher education programs of the nine universities. It was to these ends that this study was primarily directed.

Objectives

The following specific objectives were identified to guide the direction of this project:

1. Identify the competencies required for entry into the professional role of the teacher of vocational agriculture exclusive of the technical competencies of scientific agriculture.
2. Validate the competencies identified.
3. Initiate procedures for incorporating the validated competencies into the teacher education programs of the nine universities providing certification programs for vocational agriculture teachers in Texas.

Methodology

A five person advisory committee was named representing the teacher education departments of the State and a Texas Education Agency representative. The advisory committee met in May, 1975 at Texas A&M University in College Station to review the work already initiated, outline tasks to be accomplished and suggest procedures, references and consultants to be utilized at a working conference of teacher educators to be held in January, 1976, in which the essential competencies for the beginning teacher of vocational agriculture would be identified. An extensive survey of the literature was conducted to identify relevant references and materials which had been developed for other disciplines. A computer search identified a number of studies which were useful in the identification of competencies and in designing the validation study.

Each of the nine teacher education departments in the state were invited to send one representative to the first working conference, held at Texas A&M

University on January 7, 8, 9, 1976 (letter of invitation, Appendix A). The purpose of this conference was to identify essential competencies and to develop the format for an instrument which would be the basis for a validation study utilizing vocational agriculture teachers serving as supervising teachers for the nine teacher training universities. Dr. Robert Norton, Research and Development Specialist, The Center for Vocational Education, The Ohio State University, was secured as project consultant. Due to his involvement with the Center's National Project, "Performance-Based Vocational Teacher Education Curricula," Dr. Norton brought a wealth of background and expertise which enabled him to provide valuable consultation, not only during the working conference, but throughout the duration of the project.

The work of the conference participants resulted in a draft copy of a survey instrument which included 131 professional competencies for the teacher of vocational agriculture. Most of the competencies identified were modifications of competencies included in the "Vocational Teacher Competency Profile" (1) developed at The Center for Vocational Education, Columbus, Ohio. The competencies included in the profile reflect actual module titles which had been developed on the basis of research at the Center. Each module title covered one or more performance elements included in the Center publication, "Model Curricula for Vocational and Technical Teacher Education: Report No. V, General Objectives, Set II." (2)

An update of the project was mailed to the head teacher educators of agricultural education on February 11, 1976 and their assistance requested for the remaining phases of the project (letter, Appendix B).

In order to assure that needed refinements would be made in the survey instrument prior to its use in the validation study, a pilot test of the

instrument was conducted during the month of February, 1976. Ten teachers of vocational agriculture who were not supervising teachers and thus not part of the sample to be used in the validation study, and ten agricultural education staff members and graduate doctoral students at Texas A&M University were selected for the pilot study. Returns were received from all twenty participants, and their suggestions and recommendations were assimilated into the final design of the survey instrument.

The validation of the competencies included in the survey instrument was accomplished by a mailed survey of all vocational agriculture teachers in Texas serving as supervising teachers. It was determined that the most effective way to accomplish this step would be to have the survey instruments mailed by each institution to its own supervising teachers, and to have the instruments returned to that institution. On March 26, 1976, an appropriate number of instruments were mailed to each institution along with instructions for administering and collecting them (letter, Appendix C).

The instrument was designed to illicit from each teacher his opinion of the importance of each of 135 competency statements, using the following scale:

1 = No Importance
2 = Slight Importance
3 = Considerable Importance
4 = Great Importance

At the end of each section, space was provided for them to add any competencies they felt had been omitted. Also, on the last page, additional space was provided for them to add competencies that may not have been included under designated sections (cover letter and instrument, Appendix D). Competencies were included under the following sections:

* Planning, Development, and Evaluation of the Local Vocational Agriculture Program

* Instructional Planning
* Teaching Methods and Techniques
* Instructional Evaluation
* Departmental Management
* Guidance
* School-Community Relations
* F.F.A.
* Adult Education
* Professional Role and Development
* Supervised Occupational Experience Programs
* Coordinating the Cooperative Part-time Training Program

In discussing strategies for conducting the research study at the first working conference of teacher educators in January, 1976, it was determined that responses to the survey instrument should be secured from not only vocational agriculture teachers serving as supervising teachers, but also state staff personnel in Texas and teacher trainers (cover letter to teacher trainers and state staff personnel, Appendix E).

Responses were secured from 311 of the 349 supervising teachers surveyed, or 89.1 percent; 22 of the 24 teacher trainers, or 92.0 percent; and 14 of the 15 state staff personnel, or 93.0 percent. The over-all response was 347 of the 388 persons surveyed, representing an 89.4 percent response.

The results of the survey were tabulated, analyzed, and a report compiled. These data became the basic documentation for decision making at the second working conference of teacher educators, held May 19, 20, and 21, 1976 at Waco, Texas. The purpose of this conference (to include all agricultural education teacher educators) was to initiate procedures for incorporating the validated competencies into the teacher education programs of the nine universities (letter to teacher trainers, Appendix F).

Dr. Robert Norton again served as conference consultant, and brought sample curricular materials (modules) for review which had been designed for vocational teacher training programs to enhance the development of competencies in teachers. These modules were in the process of being field tested through the Center for Vocational Education's National Project, "Performance-Based Vocational Teacher Education Curricula."

Data from the competency validation study were reviewed and discussed, with particular emphasis on incorporating the competencies into teacher training programs. Competencies were placed into priority areas based on the ratings they received and were placed into categories based on a consensus of opinion as to the most appropriate level of experience for each competency to be developed in teachers - whether at the pre-service level or the in-service level.

Time was provided for teacher education staffs to work by institution in categorizing competencies which could be accommodated within existing course offerings, identifying additional curricular components required to produce the competencies, and identifying curriculum materials and learning laboratory experiences for student acquisition of the competencies. The deliberations of the second working conference were compiled and distributed to the conference participants (letter Appendix G).

Follow-up of the progress being made by the institutions in incorporating the competencies into their teacher education programs will be a continuous process at annual meetings of agricultural education teacher educators.

Findings

Table 1 presents the mean ratings of the professional competencies by the supervising teachers, teacher trainers, and state staff personnel. Of the 135 competencies, 115 received a rating of 3.00 or higher from all three groups of

Table 1

Means for Professional Competencies as Rated by Supervising Teachers, Teacher Trainers, and State Staff Personnel[1]

		ST[2]	TT[3]	SS[4]
A:	PLANNING, DEVELOPMENT, AND EVALUATION OF THE LOCAL VOCATIONAL AGRICULTURE PROGRAM			
A-1	Plan a Community Survey	2.88	3.18	2.71
A-2	Collect and Analyze Community Survey Data	2.86	3.32	2.64
A-3	Report and Use the Findings of a Community Survey	2.90	3.36	2.71
A-4	Organize or Reorganize an Advisory Committee	3.07	3.45	3.71
A-5	Maintain an Advisory Committee	3.13	3.50	3.79
A-6	Develop Program Goals and Objectives	3.63	3.82	3.50
A-7	Develop Long-Range Plans for the Program	3.57	3.77	3.71
A-8	Develop an Annual Teaching Plan (Using the Basic Curriculum Guide)	3.55	3.82	3.93
A-9	Identify Agricultural Employment Opportunities and Requirements for the Community	3.36	3.68	3.36
A-10	Conduct a Student Follow-up Study	2.99	3.55	3.43
A-11	Evaluate the Vocational Agriculture Program	3.58	3.73	3.57
B:	INSTRUCTIONAL PLANNING			
B-1	Determine Needs and Interests of Students	3.66	3.95	3.43
B-2	Develop Student Performance Objectives (Attitudes, Skills, and Knowledge)	3.51	3.68	3.14

[1]IMPORTANCE RATING
1 = No Importance
2 = Slight Importance
3 = Considerable Importance
4 = Great Importance

[2]ST = Supervising Teachers (N=311)
[3]TT = Teacher Trainers (N=22)
[4]SS = State Staff Personnel (N=14)

Table 1 - Continued

		ST	TT	SS
B:	INSTRUCTIONAL PLANNING (cont.)			
B-3	Write a Daily Teaching Plan	2.78	3.59	3.29
B-4	Select and Obtain Student Instructional Materials	3.51	3.91	3.57
B-5	Prepare Teacher-Made Instructional Materials	3.28	3.55	3.38
C:	TEACHING METHODS AND TECHNIQUES			
C-1	Introduce a Lesson	3.47	3.77	3.36
C-2	Direct Student Activities on Field Trips	3.58	3.77	3.50
C-3	Conduct Group and Panel Discussions	3.03	3.55	3.36
C-4	Stimulate Learning Through Group Interaction Techniques (Brainstorming, Buzz Group, and Question Box Techniques)	2.66	3.14	3.21
C-5	Direct Students in Instructing Other Students	2.97	3.09	3.07
C-6	Employ Simulation Techniques (Role Playing, Case Study)	2.52	2.64	3.00
C-7	Direct Supervised Study	3.20	3.55	2.93
C-8	Direct Student Laboratory Experience (Shop, Greenhouse, etc.)	3.76	4.00	3.57
C-9	Direct Students in Applying Problem-solving Techniques	3.54	3.77	3.43
C-10	Employ Oral Questioning Techniques	3.33	3.64	3.14
C-11	Employ Reinforcement Techniques	3.10	3.59	3.07
C-12	Provide Special Instruction for Slow Learners	3.25	3.32	3.29
C-13	Provide Special Instruction for Accelerated Learners	3.34	3.36	3.43
C-14	Present Information Through a Lecture-type Presentation	2.97	3.00	2.57

Table 1 - Continued

		CT	TT	SS
C:	TEACHING METHODS AND TECHNIQUES (cont.)			
C-15	Demonstrate a Manipulative Skill (Sharpening a Twist Drill)	3.61	3.91	3.64
C-16	Teach a Concept or Principle (Process of Photosynthesis)	3.26	3.68	3.15
C-17	Direct Individualized Instruction	3.35	3.41	3.08
C-18	Conduct Team Teaching	3.03	2.91	3.64
C-19	Use a Resource Person to Present Information	3.20	3.41	3.50
C-20	Illustrate with Bulletin Boards and Exhibits	3.05	3.23	3.29
C-21	Illustrate with Models, Real Objects, and Flannel Boards	3.19	3.36	3.31
C-22	Present Information with Overhead Projector	3.49	3.50	3.43
C-23	Present Information with Opaque Projector	2.84	2.50	2.93
C-24	Present Information with Filmstrips	3.38	3.36	3.21
C-25	Present Information with Slides	3.52	3.55	3.36
C-26	Present Information with Films	3.28	3.36	3.07
C-27	Present Information with Audio Recordings	2.81	3.05	2.93
C-28	Present Information with Televised and Videotaped Materials	2.70	2.86	2.77
C-29	Present Information with the Chalkboard	3.39	3.64	3.36
C-30	Present Information with Charts	3.10	3.32	3.21
C-31	Direct Programmed Instruction	3.01	2.73	2.86
C-32	Summarize a Lesson	3.41	3.81	3.21
D:	INSTRUCTIONAL EVALUATION			
D-1	Establish Criteria for Student Performance	3.30	3.55	2.93
D-2	Assess Student Understanding of Factual Information	3.37	3.68	3.00

Table 1 - Continued

		ST	TT	SS
D:	INSTRUCTIONAL EVALUATION (cont.)			
D-3	Assess Changes in Student Attitudes, Interests, and Appreciations	3.44	3.59	3.29
D-4	Assess Student Performance of Manipulative Skills and Abilities	3.46	3.68	3.36
D-5	Determine Student Grades	3.25	3.64	3.00
D-6	Evaluate Instructional Effectiveness	3.55	3.82	3.50
E:	DEPARTMENTAL MANAGEMENT			
E-1	Determine Instructional Resource Needs	3.51	3.73	3.36
E-2	Prepare Budgets	3.43	3.73	3.57
E-3	Arrange for Expanding Facilities	3.32	3.10	3.29
E-4	Arrange for Purchasing Supplies	3.64	3.68	3.36
E-5	Complete Required Forms and Reports	3.68	3.91	3.93
E-6	Organize and Maintain a Filing System	3.64	3.73	3.64
E-7	Organize and Maintain an Inventory of Departmental Supplies and Equipment	3.66	3.86	3.64
E-8	Provide for the Safety Needs of Students	3.90	4.00	3.93
E-9	Provide for the First Aid Needs of Students	3.65	3.55	3.71
E-10	Develop and Maintain Student Discipline	3.92	3.95	3.93
E-11	Manage the Instructional Environment of the Classroom (Lighting, Temperature, Housekeeping, Seating Arrangements)	3.50	3.73	3.50
E-12	Organize the Laboratory (Shop, Greenhouse, etc.)	3.74	3.95	3.79
E-13	Manage and Maintain the Laboratory (Shop, Greenhouse, etc.)	3.71	4.00	3.79
E-14	Develop and Implement a Statement of Departmental Policy	3.51	3.32	3.21

Table 1 - Continued

		ST	TT	SS
F:	GUIDANCE			
F-1	Develop and Maintain Liaison with School Guidance Personnel	3.43	3.50	3.57
F-2	Select and Use Appropriate Student Data-collection Sources and Techniques (Records, Tests, etc.)	2.97	3.32	2.86
F-3	Gather Student Data Through Personal Contacts	3.31	3.73	3.36
F-4	Use Conferences to Help Students Meet Personal, Educational and Vocational Needs	3.48	3.64	3.43
F-5	Provide Information on Educational and Career Opportunities	3.46	3.45	3.64
F-6	Assist Students in Applying for Employment or Further Education	3.55	3.55	3.50
G:	SCHOOL-COMMUNITY RELATIONS			
G-1	Develop a Plan for School-Community Relations	3.44	3.36	3.50
G-2	Give Presentations to School and Community Groups to Provide Information Concerning the Vocational Agriculture Program	3.49	3.50	3.54
G-3	Provide Brochures to Inform the School and Community About the Vocational Agriculture Program	2.94	2.73	3.36
G-4	Provide Displays in the School and Community on the Vocational Agriculture Program	3.32	3.14	3.36
G-5	Prepare News Releases and Articles Concerning Activities of the Vocational Agriculture Program	3.68	3.77	3.50
G-6	Plan, Develop, and Present Television and Radio Programs to Provide Information Concerning the Vocational Agriculture Program	2.96	3.09	3.21
G-7	Conduct an Open House	3.13	3.14	3.50

Table 1 - Continued

		ST	TT	SS
G:	SCHOOL-COMMUNITY RELATIONS (cont.)			
G-8	Maintain Liaison with Members of the Community	3.68	3.58	3.50
G-9	Cooperate with State and Local Educators (Other Teachers in Multiple Teacher Department, Local Teachers, Supervisors and Administrators, Area Supervisors, State Staff Personnel)	3.79	3.82	3.79
G-10	Obtain Feedback from the School and Community Concerning the Vocational Agriculture Program	3.57	3.81	3.57
H:	F.F.A.			
H-1	Acquaint Prospective Members and Their Parents with the Purposes, Activities, and Values of the Future Farmers of America	3.70	3.73	3.71
H-2	Assist in the Development or Revision of a Constitution and Bylaws for the Local FFA Chapter	3.10	3.18	3.14
H-3	Supervise Formal Initiation Activities of the Local FFA Chapter	3.16	3.41	3.21
H-4	Orient Students to the FFA Organization	3.68	3.57	3.57
H-5	Supervise the Election and Installation of Officers of the Local FFA Chapter	3.72	3.41	3.36
H-6	Prepare Students for Leadership Roles in the FFA	3.76	3.73	3.64
H-7	Supervise Students in Developing a Yearly Program of Activities for the Local FFA Chapter	3.55	3.73	3.57
H-8	Supervise Students in Obtaining FFA Degrees, Awards, and Scholarships	3.73	3.77	3.64
H-9	Supervise Social and Educational Activities for the Local FFA Chapter	3.55	3.55	3.31

Table 1 - Continued

		ST	TT	SS
H.	F.F.A. (cont.)			
	H-10 Supervise Students in Publicizing the Local FFA Chapter	3.65	3.64	3.43
	H-11 Assist Students with the Financial Management of the Local FFA Chapter	3.65	3.68	3.36
	H-12 Supervise Students in Planning and Conducting a Banquet	3.68	3.64	3.57
	H-13 Maintain a File of Publications Available for the Local FFA Chapter	3.15	3.27	3.14
	H-14 Supervise the Development of a Chapter Scrapbook for the Local FFA Chapter	2.95	2.86	2.57
	H-15 Evaluate the Local FFA Chapter	3.41	3.55	3.07
	H-16 Train Teams for Leadership Contests	3.70	3.50	3.50
	H-17 Train Teams for Judging Contests	3.65	3.45	3.43
	H-18 Assist Students in Participating in Shows and Fairs	3.62	3.36	3.29
	H-19 Assist Students in Participating in District, Area, State, Regional, and National Activities of the FFA	3.70	3.59	3.50
I:	ADULT EDUCATION			
	I-1 Organize an Adult Education Program	3.27	3.64	3.57
	I-2 Advise an Adult and/or Young Farmer Organization	3.30	3.55	3.64
	I-3 Plan an Annual Program of Instruction for Adults	3.19	3.55	3.36
	I-4 Utilize Specialists in the Adult Education Program	3.54	3.64	3.36
	I-5 Utilize Teaching Methods and Techniques Especially Appropriate for Adults	3.35	3.68	3.50

Table 1 - Continued

		ST	TT	SS
I:	ADULT EDUCATION (cont.)			
I-6	Organize Demonstrations, Field Days, and Tours	3.09	3.43	3.14
I-7	Conduct On-Farm and On-the-Job Instruction of Adults	3.06	3.27	3.07
I-8	Evaluate Effectiveness of an Adult Education Program	3.19	3.73	3.21
J:	PROFESSIONAL ROLE AND DEVELOPMENT			
J-1	Keep Up-to-Date in Your Profession	3.86	3.91	3.86
J-2	Participate in Professional Organizations	3.75	3.64	3.50
J-3	Establish and Maintain a Professional Philosophy of Education	3.62	3.64	3.29
J-4	Participate in School and Community Organizations	3.73	3.68	3.64
J-5	Develop a Personal Plan for Professional Development	3.56	3.52	3.36
K:	SUPERVISED OCCUPATIONAL EXPERIENCE PROGRAMS			
K-1	Assist Students in Planning and Developing Long-time Supervised Farming Program	3.62	3.82	3.64
K-2	Assist Students in Selection of Productive Projects	3.75	3.77	3.50
K-3	Supervise Students with Productive Projects	3.83	3.91	3.64
K-4	Supervise Agricultural Learning Experiences Other Than Productive Projects and On-Farm Placement	3.52	3.82	3.57
K-5	Supervise On-Farm Placement	3.38	3.59	3.57
K-6	Supervise Students in Record Keeping	3.71	3.86	3.57

Table 1 - Continued

		ST	TT	SS
L:	COORDINATING THE COOPERATIVE PART-TIME TRAINING PROGRAM (Of the supervising teachers, only those who were teaching a cooperative part-time class completed this section of the survey instrument)			
L-1	Establish Local Criteria and Guidelines for Operating a Cooperative Program	3.60	3.82	3.54
L-2	Establish and Apply Policies for Managing Student Attendance, Transfers, and Terminations	3.58	3.64	3.42
L-3	Determine Legal Aspects of Program Operation	3.55	3.64	3.54
L-4	Identify and Enroll Prospective Students	3.62	3.77	3.42
L-5	Identify and Secure Prospective Training Stations	3.70	3.91	3.54
L-6	Place Students On the Job	3.71	3.82	3.62
L-7	Direct Students in Keeping the Cooperative Record Book	3.62	3.59	3.46
L-8	Develop the Training Ability of Employers	3.24	3.32	3.23
L-9	Develop Training Plans with Employers and Students	3.53	3.86	3.54
L-10	Conduct Training Station Visits	3.67	3.86	3.54
L-11	Evaluate Students on the Job	3.61	3.77	3.62
L-12	Plan and Conduct Related Classroom Instruction	3.62	3.86	3.62
L-13	Conduct an Employer-Employee Appreciation Event	3.45	3.41	3.54

respondents. Generally, teacher educators tended to rate the competencies higher than did supervising teachers and state staff personnel. This may be

related to a feeling of commitment on the part of teacher trainers due to their personal involvement in attempting to develop these competencies in teachers.

It should be pointed out that the means reported for supervising teachers in Section L of the table, "Coordinating the Cooperative Part-Time Training Program," reflect only the responses of those teachers who were actually teaching a cooperative part-time class. Of the 311 teachers who participated in the study, 172 were teaching a cooperative part-time class, and thus responded to this section of the survey instrument.

The data presented in Table 1 became the basis for decision making at the second working conference of teacher educators. The thrust of this conference was aimed at initiating procedures for incorporating the validated competencies into the teacher education programs of the nine universities. These data were reviewed and discussed, and competencies were placed into priority areas based on the ratings they received. The competencies were also placed into categories based on a consensus of opinion as to the most appropriate level of experience for each competency to be developed in teachers - whether at the pre-service level or the in-service level. The results of the priority area and category assignments for each competency are presented in Table 2. It may be noted that each competency was assigned to one of three priority areas and to one of three categories.

Attention should be called to the fact that a few exceptions were made to the statements in the footnotes of Table 2 concerning the criteria for placement of competencies into Priority Areas I, II, or III. For example, three competencies in Section A were placed in Priority I even though they did not receive a rating of 3.50 or higher from at least two of the groups. These competencies,

Table 2

Priority Areas and Categories for Professional Competencies as Determined by Teacher Educators in Texas Using the Results of a Competency Validation Study

A: PLANNING, DEVELOPMENT, AND EVALUATION OF THE LOCAL VOCATIONAL AGRICULTURE PROGRAM

Priority I Competencies*	Categories P[1]	PI[2]	I[3]
Organize or Reorganize an Advisory Committee		X	
Maintain an Advisory Committee		X	
Develop Program Goals and Objectives		X	
Develop Long-Range Plans for the Program			X
Develop an Annual Teaching Plan (Using the Basic Curriculum Guide)	X		
Conduct a Student Follow-up Study		X	
Evaluate the Vocational Agriculture Program			X
Plan and Implement a Summer Program of Activities	X		
Priority II Competencies**			
Identify Agricultural Employment Opportunities and Requirements for the Community		X	

*Priority I Competencies were those that received the highest rating by each of the three groups of respondents--Supervising Teachers, Teacher Trainers, and State Staff Personnel. Generally, these competencies received a rating of 3.50 or higher on a 4.00 scale from at least two of the groups.

**Priority II Competencies were those that generally received a rating of between 3.00 and 3.50 on a 4.00 scale by each of the three groups of respondents--Supervising Teachers, Teacher Trainers, and State Staff Personnel.

[1]P = Competencies that are critical at the pre-service level--must be developed prior to entry into teaching.

[2]PI = Competencies that should be introduced at the pre-service level, but in-depth competence should be developed at the in-service level, after a teacher is on the job.

[3]I = Competencies that are not critical at the pre-service level. Competence should be developed at the in-service level, after a teacher is on the job. Attention should be called to them, but competency development should be left for in-service education.

Table 2 - Continued

A: PLANNING, DEVELOPMENT, AND EVALUATION OF THE LOCAL VOCATIONAL AGRICULTURE PROGRAM (cont.)	Categories		
Priority III Competencies***	P	PI	I
Plan a Community Survey		X	
Collect and Analyze Community Survey Data		X	
Report and Use Findings of a Community Survey		X	
B: INSTRUCTIONAL PLANNING			
Priority I Competencies			
Determine Needs and Interests of Students	X		
Develop Student Performance Objectives (Attitudes, Skills, and Knowledge)	X		
Write a Daily Teaching Plan	X		
Select and Obtain Student Instructional Materials	X		
Priority II Competencies			
Prepare Teacher-Made Instructional Materials		X	
C: TEACHING METHODS AND TECHNIQUES			
Priority I Competencies			
Introduce a Lesson	X		
Direct Student Activities on Field Trips	X		
Direct Student Laboratory Experience (Shop, Greenhouse, etc.)	X		
Direct Students in Applying Problem-solving Techniques	X		

***Priority III Competencies were those that generally received a rating of less than 3.00 on a 4.00 scale by all three groups of respondents--Supervising Teachers, Teacher Trainers, and State Staff Personnel.

Table 2 - Continued

C: TEACHING METHODS AND TECHNIQUES (cont.)

Priority I Competencies (cont.)	Categories P	PI	I
Demonstrate a Manipulative Skill (Sharpening a Twist Drill)	X		
Present Information with Overhead Projector	X		
Present Information with Slides	X		
Summarize a Lesson	X		
Priority II Competencies			
Conduct Group and Panel Discussions	X		
Direct Supervised Study	X		
Employ Oral Questioning Techniques	X		
Employ Reinforcement Techniques	X		
Provide Special Instruction for Slow Learners		X	
Provide Special Instruction for Accelerated Learners		X	
Teach a Concept or Principle (Process of Photosynthesis)	X		
Direct Individualized Instruction	X		
Conduct Team Teaching	X		
Use a Resource Person to Present Information	X		
Illustrate with Bulletin Boards and Exhibits	X		
Illustrate with Models, Real Objects, and Flannel Boards	X		
Present Information with Filmstrips	X		
Present Information with Films	X		
Present Information with the Chalkboard	X		
Present Information with Charts	X		
Direct Programmed Instruction	X		

Table 2 - Continued

C: TEACHING METHODS AND TECHNIQUES (cont.)	Categories		
Priority III Competencies	P	PI	I
Stimulate Learning Through Group Interaction Techniques (Brainstorming, Buzz Group, and Question Box Techniques)	X		
Direct Students in Instructing Other Students	X		
Employ Simulation Techniques (Role Playing, Case Study)	X		
Present Information Through a Lecture-type Presentation	X		
Present Information with Opaque Projector	X		
Present Information with Audio Recordings	X		
Present Information with Televised and Video-taped Materials	X		
D: INSTRUCTIONAL EVALUATION			
Priority I Competencies			
Assess Changes in Student Attitudes, Interests and Appreciations		X	
Assess Student Performance of Manipulative Skills and Abilities		X	
Determine Student Grades		X	
Evaluate Instructional Effectiveness		X	
Priority II Competencies			
Establish Criteria for Student Performance		X	
Assess Student Understanding of Factual Information		X	
E: DEPARTMENTAL MANAGEMENT			
Priority I Competencies			
Determine Instructional Resource Needs		X	
Prepare Budgets		X	

Table 2 - Continued

E: DEPARTMENTAL MANAGEMENT (cont.)	Categories		
	P	PI	I
Priority I Competencies (cont.)			
Arrange for Purchasing Supplies			X
Complete Required Forms and Reports		X	
Organize and Maintain a Filing System		X	
Organize and Maintain an Inventory of Departmental Supplies and Equipment		X	
Provide for the Safety Needs of Students	X		
Provide for the First Aid Needs of Students			X
Develop and Maintain Student Discipline	X		
Manage the Instructional Environment of the Classroom (Lighting, Temperature, Housekeeping, Seating Arrangements)	X		
Organize the Laboratory (Shop, Greenhouse, etc.)		X	
Manage and Maintain the Laboratory (Shop, Greenhouse, etc.)		X	
Organize and Operate a Multiple Teacher Department		X	
Priority II Competencies			
Arrange for Expanding Facilities			X
Develop and Implement a Statement of Departmental Policy			X
F: GUIDANCE			
Priority I Competencies			
Develop and Maintain Liaison with School Guidance Personnel		X	
Use Conferences to Help Students Meet Personal, Educational, and Vocational Needs		X	

Table 2 - Continued

	Categories		
	P	PI	I
F: GUIDANCE (cont.)			
Priority I Competencies (cont.)			
Provide Information on Educational and Career Opportunities		X	
Assist Students in Applying for Employment or Further Education		X	
Priority II Competencies			
Gather Student Data Through Personal Contacts		X	
Priority III Competencies			
Select and Use Appropriate Student Data-collection Sources and Techniques (Records, Tests, etc.)		X	
G: SCHOOL-COMMUNITY RELATIONS			
Priority I Competencies			
Develop a Plan for School-Community Relations		X	
Give Presentations to School and Community Groups to Provide Information Concerning the Vocational Agriculture Program		X	
Prepare News Releases and Articles Concerning Activities of the Vocational Agriculture Program		X	
Maintain Liaison with Members of the Community		X	
Cooperate with State and Local Educators (Other Teachers in Multiple Teacher Department, Local Teachers, Supervisors and Administrators, Area Supervisors, State Staff Personnel)		X	
Obtain Feedback from the School and Community Concerning the Vocational Agriculture Program			X
Priority II Competencies			
Provide Displays in the School and Community on the Vocational Agriculture Program		X	
Conduct an Open House			X

Table 2 - Continued

G: SCHOOL-COMMUNITY RELATIONS (cont.)

Priority III Competencies	Categories P	PI	I
Provide Brochures to Inform the School and Community About the Vocational Agriculture Program			X
Plan, Develop, and Present Television and Radio Programs to Provide Information Concerning the Vocational Agriculture Program			X

H: F.F.A.

Priority I Competencies			
Acquaint Prospective Members and Their Parents with the Purposes, Activities, and Values of the Future Farmers of America	X		
Orient Students to the FFA Organization	X		
Supervise the Election and Installation of Officers of the Local FFA Chapter	X		
Prepare Students for Leadership Roles in the FFA	X		
Supervise Students in Developing a Yearly Program of Activities for the Local FFA Chapter	X		
Supervise Students in Obtaining FFA Degrees, Awards, and Scholarships	X		
Supervise Social and Educational Activities for the Local FFA Chapter	X		
Supervise Students in Publicizing the Local FFA Chapter	X		
Assist Students with the Financial Management of the Local FFA Chapter	X		
Supervise Students in Planning and Conducting a Banquet	X		
Train Teams for Leadership Contests		X	
Train Teams for Judging Contests		X	

Table 2 - Continued

	Categories		
	P	PI	I
H: F.F.A. (cont.)			
Priority I Competencies (cont.)			
Assist Students in Participating in Shows and Fairs		X	
Assist Students in Participating in District, Area, State, Regional, and National Activities of the FFA		X	
Priority II Competencies			
Assist in the Development or Revision of a Constitution and Bylaws for the Local FFA Chapter			X
Supervise Formal Initiation Activities of the Local FFA Chapter		X	
Maintain a File of Publications Available for the Local FFA Chapter			X
Evaluate the Local FFA Chapter		X	
Priority III Competencies			
Supervise the Development of a Chapter Scrapbook for the Local FFA Chapter			X
I: ADULT EDUCATION			
Priority I Competencies			
Organize an Adult Education Program		X	
Advise an Adult and/or Young Farmer Organization		X	
Plan an Annual Program of Instruction for Adults		X	
Utilize Specialists in the Adult Education Program		X	
Utilize Teaching Methods and Techniques Especially Appropriate for Adults		X	
Priority II Competencies			
Organize Demonstrations, Field Days, and Tours			X

Table 2 - Continued

	Categories		
	P	PI	I
I: ADULT EDUCATION (cont.)			
Priority II Competencies (cont.)			
Conduct On-Farm and On-the-Job Instruction of Adults			X
Evaluate Effectiveness of an Adult Education Program			X
J: PROFESSIONAL ROLE AND DEVELOPMENT			
Priority I Competencies			
Keep Up-to-Date in Your Profession		X	
Participate in Professional Organizations		X	
Establish and Maintain a Professional Philosophy of Education		X	
Participate in School and Community Organizations		X	
Develop a Personal Plan for Professional Development		X	
K: SUPERVISED OCCUPATIONAL EXPERIENCE PROGRAMS			
Priority I Competencies			
Assist Students in Planning and Developing Long-time Supervised Farming Program	X		
Assist Students in Selection of Productive Projects	X		
Supervise Students with Productive Projects	X		
Supervise Agricultural Learning Experiences Other Than Productive Projects and On-Farm Placement		X	
Supervise On-Farm Placement		X	
Supervise Students in Record Keeping	X		

Table 2 - Continued

L: COORDINATING THE COOPERATIVE PART-TIME TRAINING PROGRAM (Responses for this section were secured from Teacher Trainers, State Staff Personnel, and Supervising Teachers who were teaching a co-op class.)

Priority I Competencies	Categories P	PI	I
Establish Local Criteria and Guidelines for Operating a Cooperative Program		X	
Establish and Apply Policies for Managing Student Attendance, Transfers, and Terminations			X
Determine Legal Aspects of Program Operation			X
Identify and Enroll Prospective Students			X
Identify and Secure Prospective Training Stations			X
Place Students On the Job			X
Direct Students in Keeping the Cooperative Record Book		X	
Develop Training Plans with Employers and Students			X
Conduct Training Station Visits			X
Evaluate Students On the Job			X
Plan and Conduct Related Classroom Instruction			X
Priority II Competencies			
Develop the Training Ability of Employers			X
Conduct an Employer-Employee Appreciation Event			X

"Organize or Reorganize an Advisory Committee," "Maintain an Advisory Committee" and "Conduct a Student Follow-up Study" were placed in Priority I because

vocational agriculture teachers are required to perform these duties under Texas Education Agency policy.

There were additional competencies placed in Priority I if one of the groups of respondents rated them over 3.50 and a second group had rated them under, but close to 3.50. It was felt that a few percentage points would not be critical in a determination of this nature. It was recognized that another group of people might choose to prioritize the competencies in a different fashion, perhaps using an entirely different set of criteria.

Those who responded to the competency survey instrument were given the opportunity to add any competencies they felt had been omitted. Based on responses received, the following two competencies were added and were included in Table 2:

(Section A) "Plan and Implement a Summer Program of Activities"

(Section E) "Organize and Operate a Multiple Teacher Department"

Both competencies received a 4.0 rating, and thus were placed in Priority I.

One might wonder why most of the competencies in Section L, Coordinating the Cooperative Part-Time Training Program, were placed in the in-service category, Category I. This is because teachers of vocational agriculture in Texas must attend a Texas Education Agency sponsored summer workshop prior to teaching a cooperative part-time training class. Since this is a required in-service education activity, a limited amount of time is devoted to this area at the pre-service level.

Specific Results Achieved

As a result of the project activities, a core of essential professional competencies required by vocational agriculture teachers were identified and

validated and a beginning made toward incorporating the competencies into the teacher education programs of the nine cooperating universities of Texas.

One outcome that is immediately evident is closer coordination of the total teacher education effort in the state of Texas. As the teacher educators worked together toward a common goal, a new sense of cooperation and unity of purpose seemed to emerge. This has been a tangible and rewarding benefit of the project.

The list of validated competencies has been distributed to all staff members of the departments of agricultural education in the state and to each person who participated in the validation study. This report of the project has been distributed to all staff members of the departments of agricultural education in the state, to Texas Education Agency personnel, and in limited numbers to other states upon request. Additionally, 100 copies of this report have been sent to the Division of Occupational Research and Development, Department of Occupational Education and Technology, Texas Education Agency, Austin, Texas.

A base has been established for the development of curriculum materials and laboratory experiences in cooperation among the agricultural education departments of the state. Another result of the project has been the development of a transportable model that could be used by other vocational teacher education disciplines to accomplish similar outcomes.

Conclusions and Implications

Feedback from the project participants has been positive regarding the effectiveness of the procedures used. The significant test of the success of the project will be the extent to which each institution incorporates the competencies into its teacher education program.

Due to the evaluation and redesign of pre-service programs by each teacher education department, improved teacher education programs should result. The identification of a core of competencies will more likely insure that all beginning teachers of vocational agriculture will be adequately prepared to fulfill ever-broadening professional expectations, such as designing and implementing the vocational agriculture program to embrace the concept of career education, and better serving disadvantaged youth and adults.

It is hoped that the progress of teacher education in Texas can be continually enhanced through the vehicle of projects similar to this one.

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BIBLIOGRAPHY

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2. Cotrell, C. J., et. al. Model Curricula for Vocational and Technical Teacher Education: Report No. V, General Objectives, Set II. The Center for Vocational and Technical Education, The Ohio State University, Columbus, Ohio, September 1972.

APPENDICES

APPENDIX A

Letter of Invitation to First Working Conference

TEXAS A&M UNIVERSITY

COLLEGE OF AGRICULTURE

COLLEGE STATION, TEXAS 77843

Department of
AGRICULTURAL EDUCATION
VOCATIONAL AGRICULTURE SERVICE

MEMORANDUM

TO: Head Teacher Trainers in Agricultural Education

FROM: Don R. Herring

DATE: November 24, 1975

SUBJECT: Project to Identify and Validate Competencies for Teacher Education in Agriculture

This is to announce that the proposal for a project to Identify and Validate Competencies for Teacher Education in Agriculture has been funded by the Division of Occupational Research and Development, Department of Occupational and Technical Education, Texas Education Agency. You will recall our discussion of this project at our teacher educators meeting at the State Vocational Agriculture Teacher's Conference in Houston in July.

I am enclosing a copy of the proposal abstract which briefly summarizes the project. The first major phase of the project is a working conference of teacher educators - one from each of the nine institutions - to identify competencies and to develop the format for an instrument which can be the basis for a validation study utilizing vocational agriculture teachers serving as supervising teachers for the nine teacher training universities.

The validation study will be conducted during the spring semester, 1976. A second working conference, involving all the agricultural education teacher educators from the nine universities, will be held in August, 1976. The purpose of this conference will be to initiate procedures for incorporating the validated competencies into the teacher education programs of the nine universities.

The first working conference will be held January 7,8,9, 1976 in Room 308 of the Rudder Conference Tower on the campus of Texas A&M University. We will begin at 9:00 a.m. on Wednesday, January 7 and will adjourn at noon on Friday, January 9. Each University is urged to send one representative to this conference. Each participant will be reimbursed for mileage and per diem at the state rate of 16¢ per mile and $22 per day. Please provide me the name of the participant from your institution by December 15, 1975. A campus map is enclosed and the Rudder Conference Tower is marked. Free parking is available in Lot 60 across the street from the Tower.

I am now in the process of securing materials to be reviewed at the first working conference. A competent consultant will be available to assist us. I believe this project will be profitable to each of us, and I certainly hope we have participation by each institution. Let me know if you have questions or if you desire additional information.

cc: Dr. R. C. Potts
Dr. Frank W. R. Hubert
Dr. Donald Clark
Mr. J. A. Marshall
Mr. G. G. Scroggins
Dr. Roger Arnold, Member, Advisory Committee
Dr. Herbert Schumann, Member, Advisory Committee
Dr. Johnny Johnson, Member, Advisory Committee

APPENDIX B

Letter to Head Teacher Trainers - Project Update

TEXAS A&M UNIVERSITY
COLLEGE OF AGRICULTURE
COLLEGE STATION, TEXAS 77843

Department of
AGRICULTURAL EDUCATION
VOCATIONAL AGRICULTURE SERVICE

MEMORANDUM

TO: Head Teacher Trainers in Agricultural Education

FROM: Don R. Herring

DATE: February 11, 1976

SUBJECT: Project update -- "Identification and Validation of Competencies for Teacher Education in Agriculture"

The purpose of this correspondence is to bring you up-to-date on the status of the competency project, and to inform you of plans for our second working conference.

Enclosed is an overview of the project plan. Objective number one of the project plan has been accomplished. I was very pleased with the efforts of the group involved in the first working conference held January 7, 8, 9, 1976, at Texas A&M University. Our consultant was Dr. Robert Norton, Center for Vocational Education, The Ohio State University, and his contribution was quite valuable. We now have a draft of a survey instrument which includes 131 competencies. The teacher educators other than myself participating in the first working conference included Dr. T. R. Buie, Southwest Texas State University; Dr. Roger Arnold, East Texas State University; Dr. Johnny Johnson, Tarleton State University; Dr. Don Knotts, Prairie View A&M University; and Dr. Herb Schumann, Sam Houston State University.

The next phase of the project (Objective number two) will be to validate the competencies identified at the first working conference. This will be accomplished by a mailed survey instrument to all vocational agriculture teachers in Texas serving as supervising teachers. It was determined that the most effective way to accomplish this step would be to have the survey instruments mailed by each institution to its own supervising teachers, and to have the instruments returned to that institution. My goal is to send copies to you for distribution to your supervising teachers by March 1, 1976 and to have them collected by you and returned to my by April 1, 1976 so that results of the survey can be tabulated, analyzed, and a report compiled prior to our second working conference. So that I will know the number of survey instruments to send you, please send me, as soon as possible, the number of supervising teachers on your active list. Postage stamps for your use in mailing the instruments, and stamped, self-addressed envelopes for the teachers to use in returning the instruments will be furnished. If you will also send me a current list of names and addresses of the teachers and the correct number of your departmental envelopes. I will be happy to have the envelopes typed for you.

February 11, 1976

The third and last phase of the project (objective number three) will be accomplished at the second working conference, to include all teacher educators in agricultural education in Texas. We had originally planned to conduct this conference in August, but many have expressed a desire to have the conference the latter part of May, since there would be fewer conflicts at that time of the year. Therefore, I have made reservations for conference facilities at the Holiday Inn in Waco, Texas (located on I-35 by the river) for the dates of May 19, 20, and 21, 1976. I have checked with Dr. Norton, our consultant, and he can come on these dates. Participants will be reimbursed for travel and per diem at the state rate of 16¢ per mile (one vehicle per institution) and $22 per day.

cc: Dr. R. C. Potts
Dr. Donald Clark
Mr. J. A. Marshall
Mr. G. G. Scroggins
Dr. Robert Norton
Dr. Herman Brown
Dr. Roger Arnold, Member Advisory Committee
Dr. Herbert Schumann, Member Advisory Committee
Dr. Johnny Johnson, Member Advisory Committee

Overview of Project Plan

Objectives	Methodology	Evaluation
1. Identify the competencies required for entry into the professional role of the teacher of vocational agriculture exclusive of the technical competencies of scientific agriculture	Use of advisory committee to plan strategy, extensive survey of literature, collection of relevant references and materials, use of consultants, working conference of teacher educators (one representative from each of the nine teacher education departments)	Validation study using experienced teachers of vocational agriculture to determine the validity of competencies identified
2. Validate the competencies identified	Design of survey instrument utilizing the competencies identified. Survey all vocational agriculture teachers in Texas serving as supervising teachers in the student teaching programs of the nine teacher education institutions	Use of consultants to assist in design of validation study. Use of advisory committee, analysis of results of validation study
3. Initiate procedures for incorporating the validated competencies into the teacher education programs of the nine universities providing certification programs by:	Study and analysis of validated competencies by university followed by working conference of all teacher educators in agricultural education in Texas	Extent to which the competencies are incorporated into each teacher education program. To be determined by follow-up and discussion at annual meetings
a. Categorizing competencies which may be accommodated within existing course offerings at the nine universities		
b. Identifying separately by university those additional curriculum components required to produce the competencies identified with each separate university developing its procedure for implementation		
c. Identifying curriculum materials and learning laboratory experiences for student acquisition of the competencies		

APPENDIX C

Instructions to Teacher Trainers for Administering and Collecting Survey Instruments

TEXAS A&M UNIVERSITY
COLLEGE OF AGRICULTURE
COLLEGE STATION, TEXAS 77843

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Department of
AGRICULTURAL EDUCATION
VOCATIONAL AGRICULTURE SERVICE

March 26, 1976

Mr. T. L. Leach, Chairman
Agricultural Education Department
Texas Tech University
Lubbock, Texas 79409

Dear T. L.:

In order to complete the next step in the project--"Identification and Validation of Competencies for Teacher Education in Agriculture," I am enclosing the following items for your use in distributing the survey instruments to your supervising teachers:

(1) 40 survey instruments as you requested (plus 5 extra copies for your use)

(2) 80 postage stamps--two 13¢ stamps for each instrument to be mailed (weight requires two stamps)

(3) 40 stamped self-addressed envelopes for your supervising teachers to use in returning the instrument

(4) A sample cover letter to be sent with the instrument. You will notice that the teachers are requested to return the instrument to you by April 15. Since I did not have your departmental letterhead stationary, I felt it best that you have your own letters prepared. There are several possibilities, including:

(a) Have individual personal letters typed on your departmental letterhead. (This would probably be the best choice if time and secretarial assistance is available.)

(b) Have the letter typed on a stencil and mimeograph sufficient copies on your departmental letterhead.

(c) Have the letter typed on your departmental letterhead, copies xeroxed, and type in the date, inside address, salutation, complimentary closing, and your signature and title on the xeroxed copies.

(5) A sample follow-up letter to be sent to non-respondents. This letter should be mailed on April 15 to teachers who haven't yet responded.

Mr. T. L. Leach
Page 2
March 26, 1976

So that you can keep up with the teachers who return the instruments, the instruments should be coded. Your institution has been assigned code numbers 310 through 349 for your 40 teachers. Please assign a number to each supervising teacher before mailing, and write the code number on the front cover of the instrument in the space provided.

Please send the instruments collected from your teachers to me no later than May 1, so that results of the survey can be tabulated, analyzed, and a report compiled prior to our second working conference. This conference is scheduled to be held in Waco, Texas on May 19, 20, and 21, 1976 at the Old Main Lodge (Best Western) located on I-35. Due to complications, I had to change the meeting place from the Holiday Inn, but the Old Main Lodge is extremely nice and they gave us a better deal than we had at the Holiday Inn. I will send you at a later date reservation cards which can be mailed directly to the motel.

If you have any questions, don't hesitate to call me.

Sincerely yours,

Don R. Herring
Associate Professor

DRH:jlb

Enclosures

cc: Dr. Earl Knebel
Mr. J. A. Marshall
Mr. G. G. Scroggins
Dr. Herman Brown
Dr. Roger Arnold, Member Advisory Committee
Dr. Herbert Schumann, Member Advisory Committee
Dr. Johnny Johnson, Member Advisory Committee

APPENDIX D

Cover Letter to Teachers and Survey Instrument

TEXAS A&M UNIVERSITY
COLLEGE OF AGRICULTURE
COLLEGE STATION, TEXAS 77843

Department of
AGRICULTURAL EDUCATION
VOCATIONAL AGRICULTURE SERVICE

March 31, 1976

As one of our supervising teachers, you have been selected to participate in a research project being conducted in cooperation with the eight other teacher training institutions in Texas preparing teachers of vocational agriculture. We need your help in determining the importance of items on a tentative list of professional competencies pertaining to your job as a teacher of vocational agriculture.

The results will be used to modify existing teacher preparation programs to insure that we emphasize those professional competencies needed by today's teacher.

Since the only teachers included in the study are supervising teachers, we hope to have 100 per cent participation. So that we can meet the deadlines established for the project, will you please complete and return the enclosed survey instrument in the stamped, self-addressed envelope by April 15? Your cooperation and assistance is greatly appreciated.

Sincerely yours,

Don R. Herring
Associate Professor

DRH:jlb

Enclosures

Code Number_____

A SURVEY INSTRUMENT TO DETERMINE
THE IMPORTANCE OF PROFESSIONAL COMPETENCIES
TO THE TEACHER OF VOCATIONAL AGRICULTURE

On the pages which follow, you will find a list of professional competencies which may be needed in order to function as a teacher of vocational agriculture. We are interested in finding out how you feel about these items in relation to your job as a vocational agriculture teacher. This information is needed to assist vocational agriculture teacher training institutions in Texas in deciding not only what competencies should be developed in teachers, but also how much time should be devoted to the development of the competencies in both pre-service and in-service educational programs.

Vocational agriculture teachers must demonstrate competence in two major areas, a technical area and a professional area. The technical area would include such competencies as dehorning an animal, cutting metal with an oxy-acetylene torch, calibrating a grain drill, and taking a soil sample. The professional area would include such competencies as planning daily lessons, directing laboratory experiences, advising the FFA, and preparing budgets and reports. This study deals only with the professional area.

INSTRUCTIONS

Please rank the degree of importance of each of the following professional competencies to you as a vocational agriculture teacher according to the following scale.

1 = No importance

2 = Slight importance

3 = Considerable importance

4 = Great importance

At the end of each section, space is provided for you to add any competencies that you feel have been omitted. Also, on the last page, additional space is provided for you to add competencies that may not have been included in the instrument under designated sections.

TENTATIVE LISTING OF
PROFESSIONAL COMPETENCIES FOR
THE TEACHER OF VOCATIONAL AGRICULTURE IN TEXAS

Circle the appropriate number after each competency statement.

IMPORTANCE RATING
1 = No Importance
2 = Slight Importance
3 = Considerable Importance
4 = Great Importance

		Level of Importance			
		None	Slight	Considerable	Great
A:	PLANNING, DEVELOPMENT, AND EVALUATION OF THE LOCAL VOCATIONAL AGRICULTURE PROGRAM				
A-1	Plan a Community Survey	1	2	3	4
A-2	Collect and Analyze Community Survey Data	1	2	3	4
A-3	Report and Use the Findings of a Community Survey	1	2	3	4
A-4	Organize or Reorganize an Advisory Committee	1	2	3	4
A-5	Maintain an Advisory Committee	1	2	3	4
A-6	Develop Program Goals and Objectives	1	2	3	4
A-7	Develop Long-Range Plans for the Program	1	2	3	4
A-8	Develop an Annual Teaching Plan (Using the Basic Curriculum Guide)	1	2	3	4
A-9	Identify Agricultural Employment Opportunities and Requirements for the Community	1	2	3	4
A-10	Conduct a Student Follow-up Study	1	2	3	4
A-11	Evaluate the Vocational Agriculture Program	1	2	3	4
A-12	_____				
	_____	1	2	3	4
A-13	_____				
	_____	1	2	3	4
B:	INSTRUCTIONAL PLANNING				
B-1	Determine Needs and Interests of Students	1	2	3	4
B-2	Develop Student Performance Objectives (Attitudes, Skills, and Knowledge)	1	2	3	4
B-3	Write a Daily Teaching Plan	1	2	3	4
B-4	Select and Obtain Student Instructional Materials	1	2	3	4
B-5	Prepare Teacher-Made Instructional Materials	1	2	3	4
B-6	_____				
	_____	1	2	3	4
B-7	_____				
	_____	1	2	3	4

Circle the appropriate number after each competency statement. IMPORTANCE RATING 1 = No Importance 2 = Slight Importance 3 = Considerable Importance 4 = Great Importance	Level of Importance			
	None	Slight	Considerable	Great
C: TEACHING METHODS AND TECHNIQUES				
C-1 Introduce a Lesson	1	2	3	4
C-2 Direct Student Activities on Field Trips	1	2	3	4
C-3 Conduct Group and Panel Discussions	1	2	3	4
C-4 Stimulate Learning Through Group Interaction Techniques (Brainstorming, Buzz Group, and Question Box Techniques)	1	2	3	4
C-5 Direct Students in Instructing Other Students	1	2	3	4
C-6 Employ Simulation Techniques (Role Playing, Case Study)	1	2	3	4
C-7 Direct Supervised Study	1	2	3	4
C-8 Direct Student Laboratory Experience (Shop, Greenhouse, etc.)	1	2	3	4
C-9 Direct Students in Applying Problem-solving Techniques	1	2	3	4
C-10 Employ Oral Questioning Techniques	1	2	3	4
C-11 Employ Reinforcement Techniques	1	2	3	4
C-12 Provide Special Instruction for Slow Learners	1	2	3	4
C-13 Provide Special Instruction for Accelerated Learners	1	2	3	4
C-14 Present Information Through a Lecture-type Presentation	1	2	3	4
C-15 Demonstrate a Manipulative Skill (Sharpening a Twist Drill)	1	2	3	4
C-16 Teach a Concept or Principle (Process of Photosynthesis)	1	2	3	4
C-17 Direct Individualized Instruction	1	2	3	4
C-18 Conduct Team Teaching	1	2	3	4
C-19 Use a Resource Person to Present Information	1	2	3	4
C-20 Illustrate with Bulletin Boards and Exhibits	1	2	3	4
C-21 Illustrate with Models, Real Objects, and Flannel Boards	1	2	3	4
C-22 Present Information with Overhead Projector	1	2	3	4
C-23 Present Information with Opaque Projector	1	2	3	4
C-24 Present Information with Filmstrips	1	2	3	4
C-25 Present Information with Slides	1	2	3	4
C-26 Present Information with Films	1	2	3	4
C-27 Present Information with Audio Recordings	1	2	3	4
C-28 Present Information with Televised and Video-taped Materials	1	2	3	4

Circle the appropriate number after each competency statement. IMPORTANCE RATING 1 = No Importance 2 = Slight Importance 3 = Considerable Importance 4 = Great Importance	Level of Importance			
	None	Slight	Considerable	Great
C-29 Present Information with the Chalkboard	1	2	3	4
C-30 Present Information with Charts	1	2	3	4
C-31 Direct Programmed Instruction	1	2	3	4
C-32 Summarize a Lesson	1	2	3	4
C-33 _____				
_____	1	2	3	4
C-34 _____				
_____	1	2	3	4
D: INSTRUCTIONAL EVALUATION				
D-1 Establish Criteria for Student Performance	1	2	3	4
D-2 Assess Student Understanding of Factual Information	1	2	3	4
D-3 Assess Changes in Student Attitudes, Interests and Appreciations	1	2	3	4
D-4 Assess Student Performance of Manipulative Skills and Abilities	1	2	3	4
D-5 Determine Student Grades	1	2	3	4
D-6 Evaluate Instructional Effectiveness	1	2	3	4
D-7 _____				
_____	1	2	3	4
D-8 _____				
_____	1	2	3	4
E: DEPARTMENTAL MANAGEMENT				
E-1 Determine Instructional Resource Needs	1	2	3	4
E-2 Prepare Budgets	1	2	3	4
E-3 Arrange for Expanding Facilities	1	2	3	4
E-4 Arrange for Purchasing Supplies	1	2	3	4
E-5 Complete Required Forms and Reports	1	2	3	4
E-6 Organize and Maintain a Filing System	1	2	3	4
E-7 Organize and Maintain an Inventory of Departmental Supplies and Equipment	1	2	3	4
E-8 Provide for the Safety Needs of Students	1	2	3	4

Circle the appropriate number after each competency statement. IMPORTANCE RATING 1 = No Importance 2 = Slight Importance 3 = Considerable Importance 4 = Great Importance	Level of Importance			
	None	Slight	Considerable	Great
E-9 Provide for the First Aid Needs of Students	1	2	3	4
E-10 Develop and Maintain Student Discipline	1	2	3	4
E-11 Manage the Instructional Environment of the Classroom (Lighting, Temperature, Housekeeping, Seating Arrangements)	1	2	3	4
E-12 Organize the Laboratory (Shop, Greenhouse, etc.)	1	2	3	4
E-13 Manage and Maintain the Laboratory (Shop, Greenhouse, etc.)	1	2	3	4
E-14 Develop and Implement a Statement of Departmental Policy	1	2	3	4
E-15 _____				
_____	1	2	3	4
E-16 _____				
_____	1	2	3	4
F: GUIDANCE				
F-1 Develop and Maintain Liaison with School Guidance Personnel	1	2	3	4
F-2 Select and Use Appropriate Student Data-collection Sources and Techniques (Records, Tests, etc.)	1	2	3	4
F-3 Gather Student Data Through Personal Contacts	1	2	3	4
F-4 Use Conferences to Help Students Meet Personal, Educational and Vocational Needs	1	2	3	4
F-5 Provide Information on Educational and Career Opportunities	1	2	3	4
F-6 Assist Students in Applying for Employment or Further Education	1	2	3	4
F-7 _____				
_____	1	2	3	4
F-8 _____				
_____	1	2	3	4
G: SCHOOL-COMMUNITY RELATIONS				
G-1 Develop a Plan for School-Community Relations	1	2	3	4
G-2 Give Presentations to School and Community Groups to Provide Information Concerning the Vocational Agriculture Program	1	2	3	4
G-3 Provide Brochures to Inform the School and Community About the Vocational Agriculture Program	1	2	3	4
G-4 Provide Displays in the School and Community on the Vocational Agriculture Program	1	2	3	4

	Circle the appropriate number after each competency statement. IMPORTANCE RATING 1 = No Importance 2 = Slight Importance 3 = Considerable Importance 4 = Great Importance	Level of Importance			
		None	Slight	Considerable	Great
G-5	Prepare News Releases and Articles Concerning Activities of the Vocational Agriculture Program	1	2	3	4
G-6	Plan, Develop, and Present Television and Radio Programs to Provide Information Concerning the Vocational Agriculture Program	1	2	3	4
G-7	Conduct an Open House	1	2	3	4
G-8	Maintain Liaison with Members of the Community	1	2	3	4
G-9	Cooperate with State and Local Educators (Other Teachers in Multiple Teacher Department, Local Teachers, Supervisors and Administrators, Area Supervisors, State Staff Personnel)	1	2	3	4
G-10	Obtain Feedback from the School and Community Concerning the Vocational Agriculture Program	1	2	3	4
G-11	_____				
	_____	1	2	3	4
G-12	_____				
	_____	1	2	3	4
H:	F.F.A.				
H-1	Acquaint Prospective Members and Their Parents With the Purposes, Activities, and Values of the Future Farmers of America	1	2	3	4
H-2	Assist in the Development or Revision of a Constitution and Bylaws for the Local FFA Chapter	1	2	3	4
H-3	Supervise Formal Initiation Activities of the Local FFA Chapter	1	2	3	4
H-4	Orient Students to the FFA Organization	1	2	3	4
H-5	Supervise the Election and Installation of Officers of the Local FFA Chapter	1	2	3	4
H-6	Prepare Students for Leadership Roles in the FFA	1	2	3	4
H-7	Supervise Students in Developing a Yearly Program of Activities for the Local FFA Chapter	1	2	3	4
H-8	Supervise Students in Obtaining FFA Degrees, Awards, and Scholarships	1	2	3	4
H-9	Supervise Social and Educational Activities for the Local FFA Chapter	1	2	3	4
H-10	Supervise Students in Publicizing the Local FFA Chapter	1	2	3	4
H-11	Assist Students with the Financial Management of the Local FFA Chapter	1	2	3	4
H-12	Supervise Students in Planning and Conducting a Banquet	1	2	3	4

Circle the appropriate number after each competency statement. IMPORTANCE RATING 1 = No Importance 2 = Slight Importance 3 = Considerable Importance 4 = Great Importance		Level of Importance			
		None	Slight	Considerable	Great
H-13	Maintain a File of Publications Available for the Local FFA Chapter	1	2	3	4
H-14	Supervise the Development of a Chapter Scrapbook for the Local FFA Chapter	1	2	3	4
H-15	Evaluate the Local FFA Chapter	1	2	3	4
H-16	Train Teams for Leadership Contests	1	2	3	4
H-17	Train Teams for Judging Contests	1	2	3	4
H-18	Assist Students in Participating in Shows and Fairs	1	2	3	4
H-19	Assist Students in Participating in District, Area, State, Regional, and National Activities of the FFA	1	2	3	4
H-20	_____				
	_____	1	2	3	4
H-21	_____				
	_____	1	2	3	4
I:	Adult Education				
I-1	Organize an Adult Education Program	1	2	3	4
I-2	Advise an Adult and/or Young Farmer Organization	1	2	3	4
I-3	Plan an Annual Program of Instruction for Adults	1	2	3	4
I-4	Utilize Specialists in the Adult Education Program	1	2	3	4
I-5	Utilize Teaching Methods and Techniques Especially Appropriate for Adults	1	2	3	4
I-6	Organize Demonstrations, Field Days, and Tours	1	2	3	4
I-7	Conduct On-farm and On-the-Job Instruction of Adults	1	2	3	4
I-8	Evaluate Effectiveness of an Adult Education Program	1	2	3	4
I-9	_____				
	_____	1	2	3	4
I-10	_____				
	_____	1	2	3	4
J:	PROFESSIONAL ROLE AND DEVELOPMENT				
J-1	Keep Up-to-Date in Your Profession	1	2	3	4
J-2	Participate in Professional Organizations	1	2	3	4

Circle the appropriate number after each competency statement. IMPORTANCE RATING 1 = No Importance 2 = Slight Importance 3 = Considerable Importance 4 = Great Importance	Level of Importance None	Slight	Considerable	Great
J-3 Establish and Maintain a Professional Philosophy of Education	1	2	3	4
J-4 Participate in School and Community Organizations	1	2	3	4
J-5 Develop a Personal Plan for Professional Development	1	2	3	4
J-6 _____				
_____	1	2	3	4
J-7 _____				
_____	1	2	3	4
K: SUPERVISED OCCUPATIONAL EXPERIENCE PROGRAMS				
K-1 Assist Students in Planning and Developing Long-time Supervised Farming Program	1	2	3	4
K-2 Assist Students in Selection of Productive Projects	1	2	3	4
K-3 Supervise Students With Productive Projects	1	2	3	4
K-4 Supervise Agricultural Learning Experiences Other Than Productive Projects and On-Farm Placement	1	2	3	4
K-5 Supervise On-Farm Placement	1	2	3	4
K-6 Supervise Students in Record Keeping	1	2	3	4
K-7 _____				
_____	1	2	3	4
K-8 _____				
_____	1	2	3	4
L: COORDINATING THE COOPERATIVE PART-TIME TRAINING PROGRAM (Complete this section only if you teach a co-op class)				
L-1 Establish Local Criteria and Guidelines for Operating a Cooperative Program	1	2	3	4
L-2 Establish and Apply Policies for Managing Student Attendance, Transfers, and Terminations	1	2	3	4
L-3 Determine Legal Aspects of Program Operation	1	2	3	4
L-4 Identify and Enroll Prospective Students	1	2	3	4
L-5 Identify and Secure Prospective Training Stations	1	2	3	4
L-6 Place Students on the Job	1	2	3	4
L-7 Direct Students in Keeping the Cooperative Record Book	1	2	3	4

Circle the appropriate number after each competency statement.

IMPORTANCE RATING
1 = No Importance
2 = Slight Importance
3 = Considerable Importance
4 = Great Importance

		Level of Importance			
		None	Slight	Considerable	Great
L-8	Develop the Training Ability of Employers	1	2	3	4
L-9	Develop Training Plans with Employers and Students	1	2	3	4
L-10	Conduct Training Station Visits	1	2	3	4
L-11	Evaluate Students On the Job	1	2	3	4
L-12	Plan and Conduct Related Classroom Instruction	1	2	3	4
L-13	Conduct an Employer-Employee Appreciation Event	1	2	3	4
L-14	_____				
	_____	1	2	3	4
L-15	_____				
	_____	1	2	3	4

M: ADDITIONAL COMPETENCIES NOT INCLUDED IN ANY OF THE SECTIONS ABOVE

M-1	_____				
	_____	1	2	3	4
M-2	_____				
	_____	1	2	3	4
M-3	_____				
	_____	1	2	3	4
M-4	_____				
	_____	1	2	3	4
M-5	_____				
	_____	1	2	3	4

APPENDIX E

Cover Letter to Teacher Trainers
and State Staff Personnel

TEXAS A&M UNIVERSITY
COLLEGE OF AGRICULTURE
COLLEGE STATION, TEXAS 77843

Department of
AGRICULTURAL EDUCATION
VOCATIONAL AGRICULTURE SERVICE

As you know, the nine teacher training institutions in Texas are involved in a cooperative research project designed to determine the importance of professional competencies to the teacher of vocational agriculture. In discussing strategies for conducting the research study at our first working conference in January, it was determined that responses to the survey instrument should be secured from not only vocational agriculture teachers serving as supervising teachers, but also state staff personnel (including area supervisors) and teacher trainers. This would make it possible to compare responses among the three groups.

Would you please complete and return the enclosed survey instrument in the stamped, self-addressed envelope by April 20? Please respond to each item as you perceive its importance from the viewpoint of a teacher trainer. Your cooperation and assistance is greatly appreciated.

Sincerely yours,

Don R. Herring
Associate Professor

DRH:jlb

Enclosures

TEXAS A&M UNIVERSITY
COLLEGE OF AGRICULTURE
COLLEGE STATION, TEXAS 77843

Department of
AGRICULTURAL EDUCATION
VOCATIONAL AGRICULTURE SERVICE

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Would you please complete and return the enclosed survey instrument in the stamped, self-addressed envelope by April 20? Please respond to each item as you perceive its importance from the viewpoint of a state staff member. Your cooperation and assistance is greatly appreciated.

Sincerely yours,

Don R. Herring
Associate Professor

DRH:jlb

Enclosures

APPENDIX F

Letter to Teacher Trainers
Concerning Second Working Conference

TEXAS A&M UNIVERSITY
COLLEGE OF AGRICULTURE
COLLEGE STATION, TEXAS 77843

Department of
AGRICULTURAL EDUCATION
VOCATIONAL AGRICULTURE SERVICE

April 29, 1976

MEMORANDUM

TO: Head Teacher Trainers in Agricultural Education

FROM: Don R. Herring

SUBJECT: Project Update -- "Identification and Validation of Competencies for Teacher Education in Agriculture"

From all indications, the survey of supervising teachers to validate the competencies is going well. So that I will have the instruments from your teachers in time to have the data analyzed and a report compiled prior to our second working conference, please send me all the instruments you have collected through Monday, May 3.

The second working conference is scheduled for May 19, 20, and 21, 1976 in the conference room at the Old Main Lodge (Best Western) in Waco, Texas, located on I-35 and 4th Street near the Baylor University Campus. (Telephone--817-753-0316) Arrangements have been made for room rates of $14 for a single and $17 for a double. We will begin the conference at 9:00 a.m. on Wednesday, May 19, and will adjourn at noon on Friday, May 21.

You will recall that all agricultural education teacher trainers in Texas are invited and encouraged to attend this conference. I am enclosing reservation cards equal to the number of teacher trainers on your staff. Please send reservation cards directly to the motel. So that I may prepare the proper amount of material to bring to the conference and make appropriate arrangements for conference facilities, please let me know as soon as possible the names of the teacher trainers who will attend from your university. Participants will be reimbursed for travel and per diem at the state rate of 16¢ per mile (one vehicle per institution) and $22 per day.

The purpose of this conference is to initiate procedures for incorporating the validated competencies into the teacher education programs of the nine universities providing certification programs by:

a. Categorizing competencies which may be accommodated within existing course offerings at the nine universities

b. Identifying separately by university those additional curriculum components required to produce the competencies identified with each separate university developing its procedure for implementation

c. Identifying curriculum materials and learning laboratory experiences for student acquisition of the competencies

Please bring with you to the conference copies of course syllabi, course outlines, statements of objectives, lists of competencies, etc., for each course taught in your pre-service teacher training program and supporting curricular materials used in these courses. This will be essential in order for the purpose of the workshop to be accomplished.

Dr. Robert Norton, The Center for Vocational-Technical Education, Columbus, Ohio will serve as our consultant. He plans to bring sample curricular materials (modules) which have been designed for vocational teacher training programs to enhance the development of competencies in teachers. It is hoped that many of these will be adaptable to our teacher training programs in Texas.

Thank you for your cooperation and support in the project. I look forward to working with you on May 19-21.

cc: Dr. R. C. Potts
Dr. Donald Clark
Mr. J. A. Marshall
Mr. G. G. Scroggins
Dr. Roger Arnold, Member Advisory Committee
Dr. Herbert Schumann, Member Advisory Committee
Dr. Johnny Johnson, Member Advisory Committee

APPENDIX G

Letter to Teacher Trainers Concerning
Deliberations of Second Working Conference

TEXAS A&M UNIVERSITY
COLLEGE OF AGRICULTURE
COLLEGE STATION, TEXAS 77843

Department of
AGRICULTURAL EDUCATION
VOCATIONAL AGRICULTURE SERVICE

June 10, 1976

TO: Teacher Trainers in Agricultural Education

FROM: Don R. Herring DRH

SUBJECT: Project Update - "Identification and Validation of Competencies for Teacher Education--Agriculture" - Summary of Second Working Conference

Enclosed is a summary of the deliberations of the teacher trainers who participated in the second working conference for the project - "Identification and Validation of Competencies for Teacher Education--Agriculture."

Thanks to those of you who participated in this effort. Please contact me if you have any questions.